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Field Crops
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# Varietal Description of NW-410 Field Bean

## Origin and breeding

NW-410, tested as NW-410 and 6R-410, was developed by the United States Department of Agriculture, Prosser, Washington. This variety was derived from a cross between Sutter Pink and pinto UI 114 made in 1964. This variety was developed by pedigree selection. Selection criteria during this time were yield, maturity and resistance to Fusarium root rot. This variety was released in 1980.

## Varietal characteristics

### Plant characteristics

Growth habit: indeterminate; semi-vining

Leaves: small to medium: dull medium green

Stem: thin; wiry

Flowers: white

Pods: light to medium green; flat in cross section; smooth; red streaks develop as pods mature; dry pods are creamy tan

Seeds: buff with dark brown mottling; rusty brown hilar ring; hilum is whitish; hilum view and cross section are elliptical; oval side view; one end is rounded the other truncated; slightly smaller than those of UI 111

Lodging resistance: poor

Cooking quality: similar to standard pinto varieties

Maturity: 106 days; earlier than UI 111

Disease reactions: U.S. data indicate resistance to race #1 and #2 of bean common mosaic virus, curly top (CTV), Fusarium root rot *(Fusarium oxysporum)*; susceptible to white mold *(Sclerotinia sclerotiorum)* and rust *(Uromyces phaseoli)*

## Performance

NW-410 has demonstrated acceptable yields and maturity in irrigated areas of southern Alberta.

### Maintenance of breeder seed

University of Idaho, Kimberly, Idaho

### Canadian representative

Alberta Wheat Pool

### Canadian distributor

Public

### Recommended by

Prairie Registration Recommending Committee for Grain

**Table 1. Agronomic performance of NW-410 and check varieties, Alberta Field Bean Trials, 1984-1987***

| Variety | Type | Station Years | Maturity (days) | Yield (kg/ha) | Harvest Index (%) | 1000 seed wt. (g) |
|---|---|---|---|---|---|---|
| NW-410 | Pinto | 3 | 106.3 | 2894.3 | — | 330.7 |
| UI 111 | Pinto | 20 | 111.0 | 2844.9 | 50.5 | 357.1 |
| Fiesta Pinto | Pinto | 11 | 103.5 | 2803.8 | 49.5 | 405.1 |
| Topaz | Pinto | 8 | 99.2 | 2692.5 | 57.8 | 364.9 |
| Viva | Pink | 21 | 106.7 | 3064.5 | 52.0 | 269.8 |
| OAC Seaforth | Navy | 6 | 108.2 | 2321.8 | 46.0 | 209.8 |
| Seafarer | Navy | 19 | 105.9 | 2227.2 | 49.0 | 199.4 |

*Brooks and Bow Island, Alberta

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